

We claim:

- SUM A'*
- A computer-implemented method comprising:
- transmitting a packet associated with a first channel of a plurality of related
- 5 channels from a source protocol layer of a source through a network;
- triggering an ECN event by the packet at the network; and,
- determining at least one channel to have decreased packets transmitted
- therethrough, in response to the triggering of the ECN event.
- 10 2. The method of claim 1, wherein determining at least one channel to have  
decreased packets transmitted therethrough comprises determining the at least one  
channel based on a congestion pricing criteria.
- 15 3. The method of claim 1, wherein the network comprises the Internet, and the  
source protocol layer comprises an IP protocol layer.
- 20 4. The method of claim 1, further comprising prior to determining at least one  
channel to have decreased packets transmitted therethrough, receiving feedback of the  
ECN event.
5. The method of claim 4, wherein receiving feedback of the ECN event comprises  
receiving feedback at one of the source and the network.
- SUM A'*

6. The method of claim 4, wherein determining at least one channel to have decreased packets transmitted therethrough comprises determining at least one of the source and the network.
- 5 7. The method of claim 4, wherein receiving feedback of the ECN event comprises receiving feedback at a layer higher than the source protocol layer and determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the layer higher than the source protocol layer.
- 10 8. The method of claim 4, wherein receiving feedback of the ECN event comprises receiving feedback at a computer program at the source and determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the computer program.
- 15 9. The method of claim 4, wherein receiving feedback of the ECN event comprises receiving feedback at a destination at which the packet transmitted is received, and determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the destination.
- 20 10. The method of claim 4, wherein receiving feedback of the ECN event comprises receiving a packet sent by a destination protocol layer of a destination indicating the ECN event at the source.

11. The method of claim 10, wherein determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the source.

- 5 12. A computerized system comprising:
- a network layer having a plurality of related channels therethrough, and triggering an ECN event in response to a congested one of the plurality of related channels;
- a source having a source protocol layer, the source sending a packet through the source protocol layer for transmission through the congested channel;
- 10 a destination having a destination protocol layer, the destination receiving the packet from the source protocol layer from the congested channel; and,
- a policy mechanism to determine at least one channel of the plurality of related channels other than the congested channel to have decreased transmission of packets therethrough based on the ECN event.

- 15 13. The system of claim 12, wherein the network layer comprises the Internet.

14. The system of claim 12, wherein at least one of the source protocol layer and the destination protocol layer comprises an IP layer.

- 20 15. The system of claim 12, wherein the policy mechanism resides at the network.
16. The system of claim 12, wherein the policy mechanism resides at the source.

- 5  
SMA
- 10  
15  
20  
25  
30
17. The system of claim 16, wherein the source is to receive feedback of the ECN event.
18. The system of claim 17, wherein the destination is to send the source a packet indicating the ECN event so that the source receives feedback thereof.
19. The system of claim 17, wherein one of the destination and the network is to indicate to the source that the ECN event has been triggered via a manner other than the source protocol layer.
20. The system of claim 12, wherein the policy mechanism resides at the destination.
21. The system of claim 20, wherein the destination is to communicate to the source the at least one channel to have decreased transmission of packets therethrough.
22. The system of claim 12, wherein the policy mechanism is based on a congestion pricing criteria.
23. The system of claim 12, wherein the ECN event is based on a congestion pricing criteria.
24. A computer comprising:

- a processor;
- a computer-readable medium;
- a protocol layer having a plurality of related channels including a congested channel;
- 5       a congestion policy program executed by the processor from the medium to determine at least one channel of the plurality of related channels other than the congested channel to have decreased transmission of packets therethrough based on an ECN event triggered within the congested channel.
- 10      25.     The computer of claim 24, wherein the protocol layer comprises a source protocol layer.
- 15      26.     The computer of claim 24, wherein the protocol layer comprises a destination protocol layer.
- 20      27.     The computer of claim 24, wherein the plurality of related channels is through a network.
- 25      28.     The computer of claim 24, wherein the congestion policy program is based on a congestion pricing criteria.
29.     A machine-readable medium having processor instructions stored thereon for execution by a processor, the medium causing performance of a method comprising:

transmitting a packet associated with a first channel of a plurality of related channels from a source protocol layer of a source through a network;

triggering an ECN event by the packet at the network;

receiving feedback of the ECN event; and,

5 determining at least one channel to have decreased packets transmitted therethrough, in response to the triggering of the ECN event.

30. The medium of claim 29, wherein determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one

10 channel based on a congestion pricing criteria.

31. The medium of claim 29, wherein the network comprises the Internet, and the source protocol layer comprises an IP protocol layer.

15 32. The medium of claim 29, further comprising prior to determining at least one channel to have decreased packets transmitted therethrough, receiving feedback of the ECN event.

*SUP A'* > 33. The medium of claim 29, wherein determining at least one channel to have decreased  
20 packets transmitted therethrough comprises determining at one of the source and the network

34. The medium of claim 29, wherein receiving feedback of the ECN event comprises receiving feedback at a layer higher than the source protocol layer and determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the layer higher than the source protocol layer.

5

35. The medium of claim 29, wherein receiving feedback of the ECN event comprises receiving feedback at a computer program at the source and determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the computer program.

10

36. The medium of claim 29, wherein receiving feedback of the ECN event comprises receiving feedback at a destination at which the packet transmitted is received, and determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the destination.

15

37. The medium of claim 29, wherein receiving feedback of the ECN event comprises receiving a packet sent by a destination protocol layer of a destination indicating the ECN event at the source.

20 38. The medium of claim 37, wherein determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at the source.

39. The medium of claim 29, wherein determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at a layer higher than the source protocol layer.
- 5      40. The medium of claim 29, wherein determining at least one channel to have decreased packets transmitted therethrough comprises determining the at least one channel at a layer higher than a destination protocol layer receiving the packet sent by the source protocol layer.
- 10     41. A computer comprising:  
          a source protocol layer;  
          a plurality of filters;  
          a plurality of channels, each channel associated with a filter and related to the other channels; and,  
15        a policy mechanism to determine at least one channel of the plurality of channels to have decreased packets transmitted therethrough from the source protocol layer through the plurality of filters, in response to an ECN.
- 20     42. The computer of claim 41, wherein the policy mechanism is based on a price congestion criteria.
43. The computer of claim 41, further comprising at least one queue, each queue associated with a filter.